

MINERALS MANAGEMENT SERVICE  
SOUTH CENTRAL REGION

April 7, 1982

Confidential Claim Retracted

Authorized by: SC

Date: 6/25/13

REVIEW OF THE ANACONDA MINERALS COMPANY'S PROPOSED RECLAMATION PLAN  
DATED MARCH 1982

REQUESTS FOR ADDITIONAL INFORMATION

1. Please provide a timetable for reclamation with as much detail as possible.
2. Please provide a discussion with supporting data on the radiological content and volume of the rail spur ballast, and the adjacent soils which you are proposing to return to the open pits. Your December 23, 1981, answer to a similar question was not acceptable.
3. Please provide an estimate of the costs of reclamation. This information may be held confidential if you so desire.
4. Please provide a summary and analysis of the data obtained from the various environmental monitoring systems at the mine. The summary should reflect the most recent data.
5. Please provide a detailed list of the  $U_3O_8$  content and volume of all protore stockpiles, including those stockpiles within the open pits such as 17-E-N, JSG, SP-1, 17-E, SP-1E, and others. This information should be submitted under separate cover, since it must be held confidential.
6. Please provide copies of the following reports:
  - a. The hydrologic reports recently completed.
  - b. The addendum to the subsidence report which was previously submitted.
  - c. The radiological report recently completed.
  - d. The geomorphologic report prepared by Dr. Stanley Schumm.



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7. Please provide the volume of material contained in the following:

- a. Topsoil stockpiles.
- b. Topsoil barrow areas.
- c. Protore stockpiles.
- d. Future backfill material.
- e. Buttress material.
- f. Waste piles to be used as backfill.
- g. Material to be used as cover for radiologically hazardous areas.

*query: suitability criteria*

8. Pages 25, 33, 41, and 44 refer to erosion control recommendations provided by the Soil Conservation Service. Please provide copies of these recommendations.

9. Please provide the data and a discussion of the methods used to develop the radiation background values found on page 19.

10. Please provide a report on the amount of damage that has been caused to the homes in Paguate by blasting at the mine. The report should also address the repairs that have been and will be made to these homes.

11. Please provide the information requested by the attached letters dated October 27, 1981, November 19, 1981, and January 19, 1982.

12. Page 12 states that "environmental sampling and visual observation have shown no significant adverse effects to date upon the environment outside the boundaries of the mine." Please provide a discussion of the sampling that has led you to this conclusion.

13. Page 28 states that the indoor gamma radiation levels will not exceed two times the natural background for that particular area.

Please provide specific values for the background levels for each area to be reclaimed to this standard. *What is background @ the new shop?*

14. Please provide a detailed description of the procedures to be used for closing the adits and declines, including the present condition of mine entries (size, existing support, etc.); composition of fill material, and allowances for settling; construction of seals or bulkheads in entries, etc. *Note: what they have given is too general!*

15. Please provide a detailed description of the filling, bulkheading, and plugging of ventholes (e.g., present condition of venthole's casing, etc.; composition of fill material, and allowances for settling; details of bulkhead construction; details of the concrete plug's thickness, location within hole column).

CLARIFICATION OF THE PROPOSED RECLAMATION MEASURES

16. The plan states that the pits will be backfilled to three feet above the projected groundwater recovery level. We question whether your recovery projections are accurate enough to allow such a slim margin for error. In addition, the cross-sections and maps in the plan are not accurate within three feet. Please provide a discussion of the range in error of your recovery projections. *error here!*

17. Will Anaconda give hiring preferences to members of the Pueblo of Laguna throughout the reclamation process?

18. Page 34 states that there are a number of examples which indicate that your revegetation techniques will retard erosion on steep slopes. Please provide a discussion of the location of these examples and of their applicability to the Jackpile-Paguate Mine.

19. Page 34 discusses the rip-rapping of head cuts to retard erosion. Where, specifically, will these measures be used? Who designed these erosion retarding structures?

20. What criteria did you use to choose the location for the structures to bring water off of the waste piles?

21. Plate 6.1-14 should be modified to show the extent of the terrace feed channels.

22. Page 44 states that broadcast seeding will be utilized on problem areas. Please explain what you mean by problem areas. Do these include all dump slopes?

23. Page 26 states that the Jackpile sandstone exposed on the pit walls has been shown not to constitute a radiological hazard. Please provide a technical justification for this statement.

*PW 2/3* 24. Anaconda previously made a commitment to backfilling the North Paguate Pit to floodplain level. Please provide your rationale for withdrawing this commitment. *Need this in writing.*

25. The plan provides only one cross-section for the FD-1 dump slope, and it is difficult to determine how much modification of the slope is being proposed. Please provide additional cross-sections or a discussion which further defines the modifications that are being proposed for this dump slope.

DISCREPANCIES IN THE PROPOSED PLAN

*(Highlights)*

26. Plate 6.1-8 and the associated cross-sections do not conform with the amount of backfilling shown on Plate 4.1-2. Plate 6.1-9 and the associated cross-sections do not conform with the amount of buttressing

shown on Plate 4.1-2. Plate 6.1-6H and cross-section 991, 800E do not conform with the amount of backfilling shown on Plate 4.1-2. Please correct these errors.

27. Plate 4.1-2 shows four topsoil stockpiles (TS-1, TS-2A, TS-2B, and TS-3) but Table 4.1-1 and page 13 show only two topsoil stockpiles. Please correct this error.

28. Page 32 states that no terrace backslope will exceed 2:1, yet the cross-sections for dumps S, T, FD-3, FD-1, and V show slopes in excess of 2:1. Please correct this discrepancy.

29. Plate 6.1-17 shows drainage relief for blocked drainage Number One, but the plan states that there will be no mitigation for this blocked drainage. Please explain this discrepancy.